

2017 Utah Winter Fine Particulate Study (UWFPS 2017) Data submission and archive instructions

1. File format

All data files need to be prepared in ICARTT file format. This link provides detailed information on the ICARTT file format:

http://esrl.noaa.gov/csd/groups/csd7/measurements/icartt_format_info.html

Note that time reported in the ICARTT file is cumulative seconds from midnight from the date indicated in the file header and the file name.

There is an online ICARTT format checker available to ensure correct file formatting.

http://esrl.noaa.gov/csd/groups/csd7/measurements/icartt_file_check/

(You will need the same user/pwd as in FTP access below.)

For users of the application Igor Pro, tools are available upon request to help in creating ICARTT files. Please contact Ken Aikin (kenneth.c.aikin@noaa.gov) if you do not already have access to these tools and if you intend to make use of Igor Pro.

2. Time format

For UWFPS 2017, data should be reported using mountain standard time (MST). Note that the ICARTT standard is normally UTC. This will be the only deviation from standard ICARTT protocol. Time columns should be clearly named to indicate this standard, e.g. "TO_Time_MST" for the twin otter time.

3. Preliminary data

Data may be submitted during the campaign using the preliminary data file name.

dataID_locationID_YYYYMMDD_RA.ict (or RB for 2nd revision, RC for 3rd, etc.)

dataID is the instrument name or identifier (e.g., "NOy", or "AMS"). The data ID is determined by the user, and may be the name of an instrument or the name of something measured by that instrument, as long as it is a brief and descriptive name. Note that multiple columns of data may be posted to a single data ID. If, for example, an instrument measures four species (e.g., NO, NO₂, NO_y, O₃), the data ID can be the instrument name and the file can contain as many columns as needed.

locationID is the platform or site abbreviation. For UWFPS 2017, we will use the following:

TO = Twin Otter
UU = University of Utah, William Browning Building site
L4 = Logan site
HW = Hawthorne site
LN = Lindon site

Data should be submitted daily using a standard time with 1 minute spacing for ground-based data and 1 second data for aircraft. Standard time files will be available on the campaign web site from the data download page (see below) Ground based with frequency lower than 1 minute should be submitted using a custom time column.

4. Final data

Final data for ground based measurements should be submitted as a single file for the entire measurement period. Standard time columns for final data will be discussed after the campaign. Final file names are:

dataID_locationID_YYYYMMDD_R0.ict (or R1 for 2nd revision, R2 for 3rd, etc.)

For final data, the date refers to the day on which the measurement begins (first entry in the time column)

5. Submission to NOAA archive

Please submit files in ICARTT format to the ftp site:

<ftp.al.noaa.gov>

uwfps

S@ItLake!

This FTP site works best with an actual FTP client, not through a browser.

After files are submitted, Ken Aikin (NOAA / CSD) will run code that downloads files from FTP, checks them, creates binary files (in Igor format) from the ICARTT file, and transfers it to the website. Files are then deleted from the FTP site. Both the original text-based ICARTT file formats and the Igor binary files will then be posted to the UWFPS website.

6. Accessing data

Data will be accessible under the 'Data' tab on the UWFPS web site.

<http://esrl.noaa.gov/csd/groups/csd7/measurements/2017uwfps/>

username: uwfps

password: S@ltLake!

All users will be required to agree to the NOAA / CSD data policy to gain access to the data page.